HELUKAT® PROFInet A CAT.5e SF/UTP PUR STATIC

PROFInet Type A, FastConnect (SK) capable, flame-retardant

TECHNICAL DATA

Industrial Ethernet cable / Cat. 5e acc. to ISO/IEC 11801, DIN EN 50173, IEC 61156-5, PROFInet Guidline

Temperature range	fixed installation -40°C to +80°C during installation -20°C to +60°C
Peak operating voltage	125 V (not for high power current installation purposes)
Test voltage core/core	2000 V
Conductor resistance at 20°C	max. 62.5 Ohm/km
Loop resistance at 20°C	max. 115.0 Ohm/km
Insulation resistance	min. 0.5 GOhm x km
Mutual capacitance core/core	at 800 Hz, approx. 50 pF/m
Rel. Velocity of Propagation	approx. 62%
Characteristic impedance	at 1 to 100 MHz, 100 Ohm ± 15 Ohm
Caloric load	approx. 0.91 MJ/m
Minimum bending radius	during installation 10x Outer-Ø fixed installation 5x Outer-Ø

CABLE STRUCTURE

- Copper conductor bare, AWG sizes
- Core insulation: PE
- Core identification: white, yellow, blue, orange
- Cores twisted into a star quad with optimal lay lengths
- Foil wrapping
- Inner sheath: halogen-free, flame retardant compound (FRNC)
- 1. Screen: plastic-coated aluminium foil (St)
  2. Screen: braided screen of tinned copper wires
- Outer sheath: PUR
- Sheath colour: green
- Length marking: in metres

PROPERTIES

- resistant to: oil, UV radiation, hydrolysis, microbes, coolants
- abrasion-resistant, notch-resistant, tear-resistant, cut-resistant, wear-resistant, low adhesion
- halogen-free
- flame-retardant

TESTS

- halogen-free acc. to DIN VDE 0482-754-1 / DIN EN 60754-1 / IEC 60754-1
- flame-retardant acc. to DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2
- certifications and approvals:
  EAC

APPLICATION

HELUKAT PROFInet A CAT.5e SF/UTP PVC STATIC for fixed installation in industrial networks, rugged. It guarantees excellent transmission characteristics and may be used even under the harshest conditions. The cable listed here corresponds to PROFInet Type A and is designed for difficult fixed installation in harsh industrial environments and offers excellent oil resistance due to the PUR jacket.

NOTES

- Conductor sizes are based on the AWG measurement system, metric conductor sizes (mm²) are approximated and are for reference only

TYPICAL VALUES

Frequency (MHz)	10	16	62.5	100
Attenuation (dB/100m)	5.2	6.9	15.0	19.5
NEXT (dB)	70.0	65.0	55.0	50.0
ACR (dB/100m)	64.8	58.1	40.0	30.5

Part no.	No. cores x AWG-No.	Cross-sec. mm², approx.	Conductor Ø mm, approx.	Core Ø mm, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
801194	2 x 2 x AWG 22 /1	0.32	0.64	1.5	6.5	32.0	64.0